

NOTES ON FISHES OF THE GENERA AGOSIA, ALGANSEA, AND
ZOPHENDUM.

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The genus *Zophendum* Jordan (Bull. Hayden's Geol. Surv. of Terr. IV, 786, 1878) has been defined in the Synopsis Fish N. A. as being a near relative of *Hybognathus*, from which it differs chiefly in the small size of the scales. These generic characters are well shown in *Zophendum australe* Jordan, and in an undescribed species also from Guanajuato. An examination of the specimens figured by Girard, of *Leuciscus tincellus* Cuv. & Val., from the City of Mexico, shows that this species agrees substantially in dentition, intestines, and other characters, notably in the breadth of the suborbital bones, with *Zophendum australe*. But this species is the original type of the earlier genus *Algansea* Girard. The name *Algansea* therefore should be used instead of *Zophendum* for *australis*, *tincella* and their congeners. This leaves the group called *Myloleucus* Cope (*obesus*, *symmetricus*, *bicolor*, etc.,) to retain the name *Myloleucus*, unless they be referred to the European genus *Leucos*.

But the original type of *Zophendum* was *Hybognathus* (misprinted *Hyborhynchus*) *siderius* Cope. An examination of Professor Cope's original types shows that it has no affinity with the other species called *Zophendum*. *Zophendum siderium* has a distinct barbel at the angle of the mouth. Its teeth are 4-4, hooked, with a rather broad grinding surface, and its intestines are moderately elongate, the peritoneum somewhat dusky. It is, in fact, identical with the species described by Girard as *Agosia chrysogaster*. I have compared Cope's types with specimens of the latter from Rio Sonora, Magdalena, Mexico. *Zophendum*, as originally defined, is therefore a synonym of *Agosia*.

Very close to *Agosia* is the group called *Apocope*. This differs in its thicker lips, and in having the teeth mostly 1, 4-4, 1, strongly hooked, and without grinding surface. This is probably a valid genus, although very close to *Rhinichthys* on the one hand and *Agosia* on the other. The fins are considerably higher in *Agosia*, and the intestines are full of vegetable matter.

The species concerned in this discussion may be arranged as follows :

Genus AGOSIA Girard=ZOPHENDUM Jordan.

Agosia chrysogaster Girard=*Hyborhynchus siderius* Cope.

Genus ALGANSEA Girard=ZOPHENDUM, not type.

Algansea tinella (Cuv. & Val). *Algansea australis* (Jordan).

Genus MYLOLEUCUS Cope.

Myloleucus obesus (Girard), etc.

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